

# **Acoustic Emission Methods for Study Fracture of Model Unidirectional Fibre Composites**

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In this paper, fracture is analyzed in model CFRP (carbon fiber reinforced plastic ) glass epoxy and organic epoxy composites by acoustic emission methods. Acoustic emission signals are generated under stress. The amplitude distribution of acoustic emission signatures was studied for two epoxy matrix materials. First matrix has a hardness of temperature 120. And second epoxy matrix has a hardness of temperature 200. Experimental results show different amplitude distributions and intensities of acoustic emission signals. Detected signals are dependent on stress and strain levels. Acoustic emission signals were correlated relative to strain deformation and modulus of elasticity. This method may be used for the study and analysis of fracture structure in construction materials.